

## **PENDING CLAIMS:**

The following listing of claims indicates the status of the claims in this application:

1. (Previously presented): Recombinant screening, cloning, or expression vector that replicates in mycobacteria and that contains:

- 1) a replicon, which is functional in mycobacteria;
- 2) a selectable marker;
- 3) a reporter cassette comprising:
  - a) a multiple cloning site (polylinker),
  - b) optionally a transcription terminator, which is active in mycobacteria, upstream of the polylinker,
  - c) a coding nucleotide sequence, which is derived from a gene encoding a protein expression, export and/or secretion marker, said nucleotide sequence lacking its initiation codon and its regulatory sequences, and
  - d) a coding nucleotide sequence derived from a gene encoding a marker for the activity of promoters, which are contained in the same fragment, said nucleotide sequence having its initiation codon.

2-74 (Cancelled).

75. (Previously presented): The recombinant vector according to claim 1, wherein the coding nucleotide sequence derived from a gene encoding a protein

expression, export and/or secretion marker is a coding sequence derived from alkaline phosphatase *phoA* gene.

76. (Previously presented): The recombinant vector according to claim 1, wherein the coding nucleotide sequence derived from a gene encoding a protein expression, export and/or secretion marker is a coding sequence of a gene for  $\beta$ -agarase, for a nuclease of a staphylococcus, or for a  $\beta$ -lactamase of a mycobacterium.

77. (Previously presented): The recombinant vector according to claim 1, wherein the coding nucleotide sequence derived from a gene encoding a marker for the activity of promoters which are contained in the same fragment is a coding sequence derived from a firefly luciferase *luc* gene.

78. (Previously presented): The recombinant vector according to claim 1, wherein the coding nucleotide sequence derived from a gene encoding a marker for the activity of promoters which are contained in the same fragment is a coding sequence derived from Green Fluorescent Protein ("GFP") gene.

79. (Previously presented): The recombinant vector according to claim 1, wherein the transcription terminator which is active in mycobacteria is a T4 coliphage terminator (tT4).

80. (Previously presented): The recombinant vector according to claim 1, wherein the vector is a plasmid chosen from the following plasmids, which have been deposited at the CNCM (Collection Nationale de Cultures de Microorganismes, Paris, France):

a) pJVEDa which was deposited at the CNCM under the No. I-1797, on 12 December 1996;

b) pJVEDb which was deposited at the CNCM under the No. I-1906, on 25 July 1997; and

c) pJVEDc which was deposited at the CNCM under the No. I-1799, on 12 December 1996.

81. (Previously presented): The recombinant vector according to claim 1, comprising at one cloning site of the polylinker a nucleic acid sequence of a mycobacterium in which detection is carried out of a polypeptide capable of being exported and/or secreted, and/or of being induced or repressed during infection with said mycobacterium, or expressed or produced constitutively, as well as the associated promoter and/or regulatory sequences which are capable of allowing or promoting export and/or secretion of said polypeptide, or all or part of a gene encoding said polypeptide.

82. (Previously presented): The recombinant vector according to claim 1, wherein the mycobacterial nucleic acid sequence which it contains is obtained by

physical fragmentation or by enzymatic digestion of genomic DNA or of DNA which is complementary to an RNA of a mycobacterium.

83. (Previously presented): The recombinant vector according to claim 1, wherein said mycobacterium is *M. tuberculosis*.

84. (Previously presented): The recombinant vector according to claim 1, wherein said mycobacterium is chosen from *M. africanum*, *M. bovis*, *M. avium* or *M. leprae*.

85. (Previously presented): The recombinant vector according to claim 83, wherein the vector is a plasmid chosen from the following plasmids which have been deposited at the CNCM:

- a) p6D7, which was deposited on 28 January 1997 at the CNCM under the No. I-1814;
- b) p5A3, which was deposited on 28 January 1997 at the CNCM under the No. I-1815;
- c) p5F6, which was deposited on 28 January 1997 at the CNCM under the No. I-1816;
- d) p2A29, which was deposited on 28 January 1997 at the CNCM under the No. I-1817,
- e) pDP428, which was deposited on 28 January 1997 at the CNCM under the No. I-1818,

f) p5B5, which was deposited on 28 January 1997 at the CNCM under the No. I-1819,

g) p1C7, which was deposited on 28 January 1997 at the CNCM under the No. I-1820,

h) p2D7, which was deposited on 28 January 1997 at the CNCM under the No. I-1821,

i) p1B7, which was deposited on 31 January 1997 at the CNCM under the No. I-1843,

j) pJVED/*M. tuberculosis*, which was deposited on 25 July 1997 at the CNCM under the No. I-1907, and

k) pM1C25, which was deposited on 4 August 1998 at the CNCM under the No. I-2062.

86. (Previously presented): Recombinant vector according to claim 85, wherein the vector is plasmid pDP428, which was deposited on 28 January 1997 at the CNCM under the No. I-1818.

87-99 (Cancelled).

100. (Previously presented): A recombinant mycobacterium transformed with a recombinant vector according to claim 1.

101-147. (Cancelled).